

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re U.S. Patent Application of)
Stephen G. Johnson, Norbert W. Elsdorfer and)
Charles M. Anastasia) Examiner:
Application No. 10/657,723)
Confirmation No. 8898) Art Unit:
Filed September 8, 2003)
For: Signal Intensity Range Transformation)
Apparatus and Method)

**INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. §§ 1.97 AND 1.98**

Commissioner For Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Applicants submit herewith Form PTO-1449, "Information Disclosure Citation."

Pursuant to the Notice from the U.S. Patent and Trademark Office ("PTO") dated July 11, 2003, the PTO has waived the requirement under 37 C.F.R. 1.98(a)(2)(i) requiring submission of a copy of each cited U.S. patent and each cited U.S. patent application for applications filed after June 30, 2003 and for all international applications entering the national stage under 35 U.S.C. Sec. 371 after June 30, 2003. Therefore, we are not enclosing copies of the listed U.S. patents and U.S. patent applications.

Since this Statement is being filed before the mailing date of an Office Action on the merits, no fee is necessary.

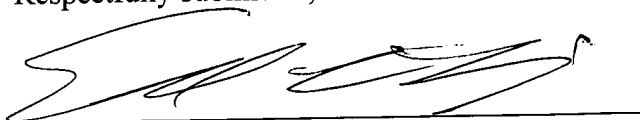
Attorney Docket No. 502 P 207
Application No. 10/657,723
Page 2

Please charge any additional fees associated with this Communication or credit any
overpayment to our Deposit Account No. 23-0280.

Date

2/20/04

Respectfully submitted,



Edward L. Bishop, Reg. No. 39,110
WALLENSTEIN WAGNER & ROCKEY, LTD.
311 South Wacker Drive, 53rd Floor
Chicago, Illinois 60606-6630
312.554.3300
Attorneys for Applicants

CERTIFICATE OF MAILING (37 C.F.R. § 1.8a)

I hereby certify that this correspondence is, on the date shown below, being deposited with the United States Postal Service with
sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, Virginia
22313-1450 on Feb. 20, 2004

Kathleen Rundquist
Kathleen Rundquist/193604.1



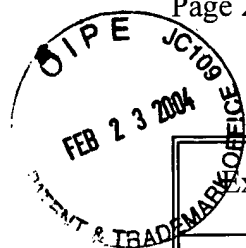
**INFORMATION
DISCLOSURE
STATEMENT BY
APPLICANT**

PTO-1449

WW&R File No.: 502 P 207
Application No.: 10/657,723
Applicants: Stephen G. Johnson et al.
Filing Date: September 8, 2003
Art Unit:

U.S. PATENT DOCUMENTS

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	2,758,676	Nikazy	08/14/1956
	3,195,126	Barker	07/13/1965
	3,255,434	Schwarz	06/07/1966
	3,534,499	Chaffee	10/20/1970
	3,562,423	Murphy	02/09/1971
	3,590,151	Keith	06/29/1971
	3,663,937	Bolner	05/16/1972
	3,668,625	Wolf et al.	06/06/1972
	3,685,012	Case et al.	08/15/1972
	3,686,434	Lemelson	08/22/1972
	3,691,302	Gaebele et al.	09/12/1972
	3,691,556	Bloice	09/12/1972
	3,740,466	Marshall et al.	06/19/1973
	3,796,208	Bloice	03/12/1974
	3,816,648	Noll et al.	06/11/1974
	3,852,592	Scoville et al.	12/03/1974
	3,890,463	Ikegami et al.	06/17/1975
	3,924,130	Cohen et al.	12/02/1975
	3,930,735	Kerr	01/06/1976
	3,947,833	Eckstein, Jr.	03/30/1976
	3,988,533	Mick et al.	10/26/1976
	4,044,860	Kaneko et al.	08/30/1977
	4,063,282	Exton	12/13/1977
	4,081,830	Mick et al.	05/28/1978



Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	4,133,004	Fitts	01/02/1979
	4,136,950	Labrum et al.	01/30/1979
	4,1418,062	Kamin	04/03/1979
	4,160,998	Kamin	07/10/1979
	4,163,357	Grieve et al.	08/07/1979
	4,163,991	Burrig	08/07/1979
	4,173,402	Hosike et al.	11/06/1979
	4,183,013	Agrawala et al.	01/08/1980
	4,185,298	Billet et al.	01/22/1980
	4,187,519	Vitels et al.	02/05/1980
	4,198,653	Kamin	04/15/1980
	4,214,265	Olesen	07/22/1980
	4,219,845	Gibbons et al.	08/26/1980
	4,219,847	Pinkney et al.	08/26/1980
	4,240,109	Michael et al.	12/16/1980
	4,245,243	Gutjahr et al.	01/13/1981
	4,249,207	Hosman et al.	02/03/1981
	4,249,212	Ito et al.	02/03/1981
	4,257,063	Loughry et al.	03/17/1981
	4,258,351	Shigeta et al.	03/24/1981
	4,298,858	Romanski	11/03/1981
	4,317,130	Brown	02/23/1982
	4,337,481	Mick et al.	06/29/1982
	4,364,113	Sengebusch et al.	12/14/1982
	4,395,699	Sternberg	07/26/1983
	4,408,224	Yoshida	10/04/1983

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	4,410,910	Andes	10/18/1983
	4,414,685	Sternberg	11/08/1983
	4,433,325	Tanaka et al.	02/21/1984
	4,433,438	Couturier	02/21/1984
	4,435,835	Sakow et al.	03/06/1984
	4,449,144	Suzuki	05/15/1984
	4,450,482	Ackerman	05/22/1984
	4,455,550	Iguchi	06/19/1984
	4,458,266	Mahoney	07/03/1984
	4,479,145	Azuma et al.	10/23/1984
	4,490,851	Gerhart et al.	12/25/1984
	4,493,420	Dennis	01/15/1985
	4,506,765	Payne et al.	03/26/1985
	4,520,343	Koh et al.	05/28/1985
	4,520,504	Walker et al.	05/28/1985
	4,543,567	Shiratan et al.	09/24/1985
	4,554,459	Tsutsumi et al.	11/19/1985
	4,555,724	Enriquez	11/26/1985
	4,556,900	Willis	12/03/1985
	4,565,029	Kornbrekke et al.	01/21/1986
	4,569,078	Zuk	02/04/1986
	4,574,393	Blackwell et al.	03/04/1986
	4,577,344	Waslen et al.	03/18/1986
	4,589,030	Klay	05/13/1986
	4,589,139	Hada et al.	05/13/1986
	4,626,891	Achiha	12/02/1986

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	4,626,908	Tani	12/02/1986
	4,639,767	Suzuki	01/27/1987
	4,641,120	Bonfig et al.	02/03/1987
	4,641,356	Sternberg	02/03/1987
	4,653,109	Lemelson et al.	03/24/1987
	4,662,479	Tsuji et al.	05/05/1987
	4,665,554	Sternberg	05/12/1987
	4,669,218	Kornbrekke et al.	06/02/1987
	4,679,077	Yuasa et al.	07/07/1987
	4,680,704	Konicek et al.	07/14/1987
	4,692,806	Anderson et al.	09/08/1987
	4,694,329	Belmares-Sarabia et al.	09/15/1987
	4,698,937	Kornbrekke et al.	10/13/1987
	4,709,264	Tamusa et al.	11/24/1987
	4,736,252	Nakagawa et al.	04/05/1988
	4,737,847	Araki et al.	04/12/1988
	4,739,401	Sacks et al.	04/19/1988
	4,742,549	Roschier	05/03/1988
	4,760,607	Sternberg et al.	07/26/1988
	4,779,131	Matsumoto et al.	10/18/1988
	4,783,833	Kowubata et al.	11/08/1988
	4,794,248	Gray	12/27/1988
	4,685,145	Schiller	08/04/1987
	4,685,146	Fenster et al.	08/04/1987
	4,799,243	Zepke	01/17/1989
	4,807,034	Takavch et al.	02/21/1989

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	4,823,010	Kornbrekke et al.	04/18/1989
	4,825,393	Nishiya	04/25/1989
	4,831,641	Niemi	05/16/1989
	4,839,648	Beucher et al.	06/13/1989
	4,845,761	Cate et al.	07/04/1989
	4,847,772	Michalopoulos et al.	07/11/1989
	4,849,906	Chodos et al.	07/18/1989
	4,858,156	Martin	08/15/1989
	4,860,371	Matsuyama et al.	08/22/1989
	4,868,651	Chou et al.	09/19/1989
	4,871,948	Nelson	10/03/1989
	4,874,063	Taylor	10/17/1989
	4,876,728	Roth	10/24/1989
	4,881,270	Knecht et al.	11/14/1989
	4,884,136	Ninomiya et al.	11/28/1989
	4,906,940	Greene et al.	03/06/1990
	4,908,704	Fujioka et al.	03/13/1990
	4,920,572	Sugita et al.	04/24/1990
	4,924,310	von Brandt	05/08/1990
	4,924,416	Sasao	05/08/1990
	4,928,176	Schmidt et al.	05/22/1990
	4,931,864	Kawamura et al.	06/05/1990
	4,937,878	Lo et al.	06/26/1990
	4,947,353	Quinlan, Jr.	08/07/1990
	4,951,137	Kisov et al.	08/21/1990
	4,959,714	Lo et al.	09/25/1990

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	4,962,419	Hibbard et al.	10/09/1990
	4,967,083	Kornbrekke et al.	10/30/1990
	4,969,202	Groezienger	11/06/1990
	4,974,077	Kusaba	11/27/1990
	4,975,970	Zettel et al.	12/04/1990
	4,975,973	Kasane et al.	12/04/1990
	4,979,136	Weiman et al.	12/18/1990
	4,984,071	Yonezawa	01/08/1991
	4,985,618	Inada et al.	01/15/1991
	4,987,602	Brunner et al.	01/22/1991
	4,991,092	Greensite	02/05/1991
	5,001,557	Begle	03/19/1991
	5,008,739	D'Luua et al.	04/16/1991
	5,010,578	Siener et al.	04/23/1991
	5,018,218	Peregrim et al.	05/21/1991
	5,022,062	Annis	06/04/1991
	5,023,809	Spackman et al.	06/11/1991
	5,031,227	Raasch et al.	07/09/1991
	5,032,905	Koga	07/16/1991
	5,034,986	Karmann et al.	07/23/1991
	5,047,851	Sauerwein et al.	09/10/1991
	5,052,045	Peregrim et al.	09/24/1991
	5,067,014	Bergen et al.	11/19/1991
	5,075,632	Payne et al.	12/24/1991
	5,091,967	Ohsawa	02/25/1992
	5,099,324	Abe	03/25/1992

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	5,101,440	Watanabe et al.	03/31/1992
	5,103,305	Watanabe	04/07/1992
	5,115,477	Groezienger	05/19/1992
	5,119,442	Brown	06/02/1992
	5,121,201	Seki	06/09/1992
	5,134,472	Abe	07/28/1992
	5,134,661	Reinsch	07/28/1992
	5,140,649	Kageyama	08/18/1992
	5,142,152	Boiucaner	08/25/1992
	5,149,921	Picado	09/22/1992
	5,150,421	Morishita et al.	09/22/1992
	5,150,426	Bauh et al.	09/22/1992
	5,151,945	Lee et al.	09/29/1992
	5,159,646	Kumagai	10/27/1992
	5,161,107	Mayeaux et al.	11/03/1992
	5,162,902	Bell et al.	11/10/1992
	5,181,254	Schweizer et al.	01/19/1993
	5,182,776	Suzuki et al.	01/26/1993
	5,182,778	Rudek et al.	01/26/1993
	5,187,747	Capello et al.	02/16/1993
	5,212,740	Pack et al.	05/18/1993
	5,239,596	Mahoney	08/24/1993
	5,241,608	Fogel	08/31/1993
	5,243,663	Kudoh	09/07/1993
	5,243,668	Kitamura et al.	09/07/1993
	5,247,366	Ginosar et al.	09/21/1993

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	5,249,241	Silverman et al.	09/28/1993
	5,257,209	Maskandey	10/26/1993
	5,258,586	Suzuki et al.	11/02/1993
	5,263,098	Hovikami	11/16/1993
	5,271,064	Dhawan et al.	12/14/1993
	5,281,964	Iida et al.	01/25/1994
	5,282,337	Duhamel et al.	02/01/1994
	5,283,573	Takatov et al.	02/01/1994
	5,289,520	Pellegrino et al.	02/22/1994
	5,291,313	Kim	03/01/1994
	5,294,986	Tsuji et al.	03/15/1994
	5,296,852	Rathi	03/22/1994
	5,298,697	Suzuki et al.	03/29/1994
	5,300,739	Bittner	04/05/1994
	5,305,395	Mahoney et al.	04/19/1994
	5,311,598	Bose et al.	05/10/1994
	5,313,295	Taniguchi et al.	05/17/1994
	5,315,389	Izawa et al.	05/24/1994
	5,319,547	Krug et al.	06/07/1994
	5,353,021	Toyamas	10/04/1994
	5,359,674	van der Wal	10/25/1994
	5,376,962	Zorten	12/27/1994
	5,387,768	Izard et al.	02/07/1995
	5,387,930	Toh	02/07/1995
	5,402,118	Aoki	03/28/1995
	5,406,501	Florent	04/11/1995

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	5,410,418	Yonezawa	04/25/1995
	5,420,971	Westerink et al.	05/30/1995
	5,426,517	Schwartz	06/20/1995
	5,426,685	Pellegrino et al.	06/20/1995
	5,432,528	Ritter	07/11/1995
	5,436,984	Saskkinen et al.	07/25/1995
	5,438,360	Edwards	08/01/1995
	5,450,502	Eschbach et al.	09/12/1995
	5,483,351	Mailloux et al.	01/09/1996
	5,490,218	Krug et al.	02/06/1996
	5,500,904	Markaudey et al.	03/19/1996
	5,509,082	Toyama et al.	04/16/1996
	5,511,133	Shimizu et al.	04/23/1996
	5,519,784	Velmeulen et al.	05/21/1996
	5,528,703	Lee	06/18/1996
	5,537,224	Suzuki et al.	07/16/1996
	5,544,258	Levien	08/06/1996
	5,551,533	Ng	09/03/1996
	5,555,318	Ito et al.	09/10/1996
	5,572,595	Kumagai et al.	11/05/1996
	5,581,370	Fuss et al.	12/03/1996
	5,581,625	Connell	12/03/1996
	5,590,217	Toyama	12/31/1996
	5,592,567	Kilger	01/07/1997
	5,596,418	Strolle et al.	01/28/1997
	5,598,338	Tanigrchi et al.	01/28/1997

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	5,604,822	Pearson et al.	02/18/1997
	5,606,432	Ohtsuka et al.	02/25/1997
	5,609,152	Pellegrino et al.	03/11/1997
	5,612,928	Haley et al.	03/18/1997
	5,617,484	Wada et al.	04/01/1997
	5,621,868	Mizutani et al.	04/15/1997
	5,625,709	Kasdon	04/29/1997
	5,631,975	Riglet et al.	05/20/1997
	5,631,984	Graf et al.	05/20/1997
	5,640,468	Hsu	06/17/1997
	5,657,403	Wolff et al.	08/12/1997
	5,668,890	Winkelman	09/16/1997
	5,673,355	Strolle et al.	09/30/1997
	5,675,624	Relihan et al.	10/07/1997
	5,682,438	Kojima et al.	10/28/1997
	5,684,898	Bendy et al.	11/04/1997
	5,687,249	Kato	11/11/1997
	5,687,251	Erler et al.	11/11/1997
	5,701,163	Richards et al.	12/23/1997
	5,727,080	Cox et al.	03/10/1998
	5,734,746	Jaspers	03/31/1998
	5,740,801	Branson	04/21/1998
	5,748,773	Tashiro et al.	05/05/1998
	5,748,802	Winkelman	05/05/1998
	5,756,981	Roustaei et al.	05/26/1998
	5,757,286	Jonsson et al.	05/26/1998

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	5,761,326	Brady et al.	06/02/1998
	5,771,485	Echigo	06/23/1998
	5,774,569	Waldenmaier	06/30/1998
	5,799,100	Clarke et al.	08/25/1998
	5,799,106	Mooney et al.	08/25/1998
	5,802,208	Podilchuk et al.	09/01/1998
	5,808,697	Fujimura et al.	09/15/1998
	5,809,162	Csipkes et al.	09/15/1998
	5,822,453	Lee et al.	10/13/1998
	5,825,922	Pearson et al.	10/20/1998
	5,832,111	Florent	11/03/1998
	5,832,118	Kim	11/03/1998
	5,832,139	Battesman et al.	11/03/1998
	5,835,613	Breed et al.	11/10/1998
	5,835,618	Fang et al.	11/10/1998
	5,835,638	Rucklidge et al.	11/10/1998
	5,838,299	Smith et al.	11/17/1998
	5,838,758	Krug et al.	11/17/1998
	5,844,565	Mizutani et al.	12/01/1998
	5,845,000	Breed et al.	12/01/1998
	5,845,007	Ohashi et al.	12/01/1998
	5,847,755	Wixson et al.	12/08/1998
	5,848,179	Braet	12/08/1998
	5,848,190	Kleehamer et al.	12/08/1998
	5,854,851	Bamberger et al.	12/29/1998
	5,857,029	Patel	01/05/1999

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	5,859,698	Chou et al.	01/12/1999
	5,862,254	Kim et al.	01/19/1999
	5,872,857	Chudos et al.	02/16/1999
	5,875,264	Carlstrom	02/23/1999
	5,877,819	Branson	03/02/1999
	5,883,969	Le Gouzouguec et al.	03/16/1999
	5,890,808	Neff et al.	04/06/1999
	5,892,917	Myerson	04/06/1999
	5,901,241	Koljonen et al.	05/04/1999
	5,907,643	Adach	05/25/1999
	5,937,090	Kim	08/10/1999
	5,946,404	Badsh et al.	08/31/1999
	5,946,407	Bamberger et al.	08/31/1999
	5,949,918	McCaffrey	09/07/1999
	5,956,435	Buzug et al.	09/21/1999
	5,963,276	Inbar	10/05/1999
	5,970,164	Bamberger et al.	10/19/1999
	5,974,169	Bachelder	10/26/1999
	5,978,502	Ohash	11/02/1999
	5,978,507	Shackleton et al.	11/02/1999
	5,982,424	Simerly et al.	11/09/1999
	5,982,917	Clarke et al.	11/09/1999
	5,999,660	Zorin et al.	12/07/1999
	6,002,525	Poulo et al.	12/14/1999
	6,002,782	Dionysinu	12/14/1999
	6,020,931	Bilbrey et al.	02/01/2000

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	6,041,138	Nishida	03/21/2000
	6,055,334	Kato	04/25/2000
	6,067,366	Simanovsky et al.	05/23/2000
	6,069,971	Kanno et al.	05/30/2000
	6,075,871	Simanovsky et al.	06/13/2000
	6,075,890	Park	06/13/2000
	6,081,618	Naoi et al.	06/27/2000
	6,088,468	Ito et al.	07/11/2000
	6,101,294	McCaffrey et al.	08/08/2000
	6,104,763	Limberg	08/15/2000
	6,111,607	Kampyama	08/29/2000
	6,111,974	Hiraoglu et al.	08/29/2000
	6,111,980	Sano et al.	08/29/2000
	6,118,892	Williams	09/12/2000
	6,134,339	Luo	10/17/2000
	6,134,373	Strolle et al.	10/17/2000
	6,137,893	Michael et al.	10/24/2000
	6,148,103	Nenonen	11/14/2000
	6,154,560	Cothren et al.	11/28/2000
	6,157,373	Rago	12/05/2000
	6,163,621	Paik et al.	12/19/2000
	6,201,616	Sasanuma et al.	03/13/2001
	6,219,447	Lee	04/17/2001
	6,246,450	Inbar	06/12/2001

Examiner Initial	U.S. Patent Document No.	Name of Patentee or Applicant	Date of Publication
	6,246,827	Strolle et al.	06/12/2001
	6,255,650	Warner et al.	07/03/2001
	6,259,472	Park	07/10/2001
	6,266,102	Azuma et al.	07/24/2001
	6,272,246	Taka	08/07/2001
	6,320,981	Yada	11/20/2001
	6,373,533	Kawabata et al.	04/16/2002
	6,392,764	Eschbach et al.	05/21/2002
	6,393,148	Bhaskar	05/21/2002
	6,415,049	Yanagita et al.	07/02/2002
	6,421,097	O'Rourke	07/16/2002

FOREIGN PATENT DOCUMENTS

Examiner Initial	Foreign Patent Document			Name of Patentee or Applicant	Date of Publication	T
	Office	Number	Kind			

OTHER PRIOR ART OR NON-PATENT LITERATURE DOCUMENTS

Examiner Initial	(including Author (in capital letters), Title of the article, Title of the item, Date, Pages, Volume-Issue number, Publisher, City and/or Country where published.)	T

Examiner: _____ Date
Considered: _____

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.